# ADDENDUM

# Combined Sewer Overflow
# Long Term Control Plan

## Alternatives Analysis and
## Recommended Plan Evaluation

## Consent Decree NO. 2:16CV512-PPS
## NPDES Permit No. IN0022977

Gary Sanitary District

| Document History | |
|---|---|
| Submittal | August 8, 2019 |
| Addendum 1 | May 8, 2020 |
| Addendum 2 | August 28, 2020 |

CDM Smith

# Table of Contents

# Response to Overall Comments

1) *GSD concludes that Gary falls in the mid-range for Residential Indicator (1.8% of MHI). EPA's contractor also concludes that Gary falls in the mid-range for Residential Indicator, but arrives at 1.5% MHI after considering data for GSD's entire service area population. Provide the basis and supporting documentation for the statement on page 7-17 of the Combined Sewer Overflow Long Term Control Plan Alternative Analysis and Recommended Plan Evaluation (August 2019): "The city of Gary has limited capacity to undertake any level of capital investment." Specifically, identify how the City arrived at this conclusion.*

As noted in the addendum issued May 8, 2020, we believe that the static approach that the City was requested to prepare does not adequately and appropriately assess the Financial Capability of the GSD. This is why we submitted in the LTCP Report dated August 8, 2019 a financial capability analysis using a dynamic approach specifically allowed for in EPA's November 2014 modifications to the Affordability Process. Given the economic situation of Gary, we believe that this is the casebook example of why the dynamic approach is a more appropriate methodology to assess GSD's financial capability. We refer the Agency to Section 7.3 of the LTCP report that summarizes the most pertinent economic and financial information regarding affordability for the GSD. We think Figure 7-4 from that report is especially telling. Please note that when the report was prepared 2017 was the latest data set available, 2018 data is now available but not materially modify the picture presented below. And, also please note, that the data that we have used does not reflect the impact of COVID-19 on GSD's finances which has among other things temporary closures of some of its largest industrial customers, overall drop in billable sales and a prohibition to enforce bills. It is entirely possible that the pandemic will further exacerbate the income disparities shown below further complicating affordability.

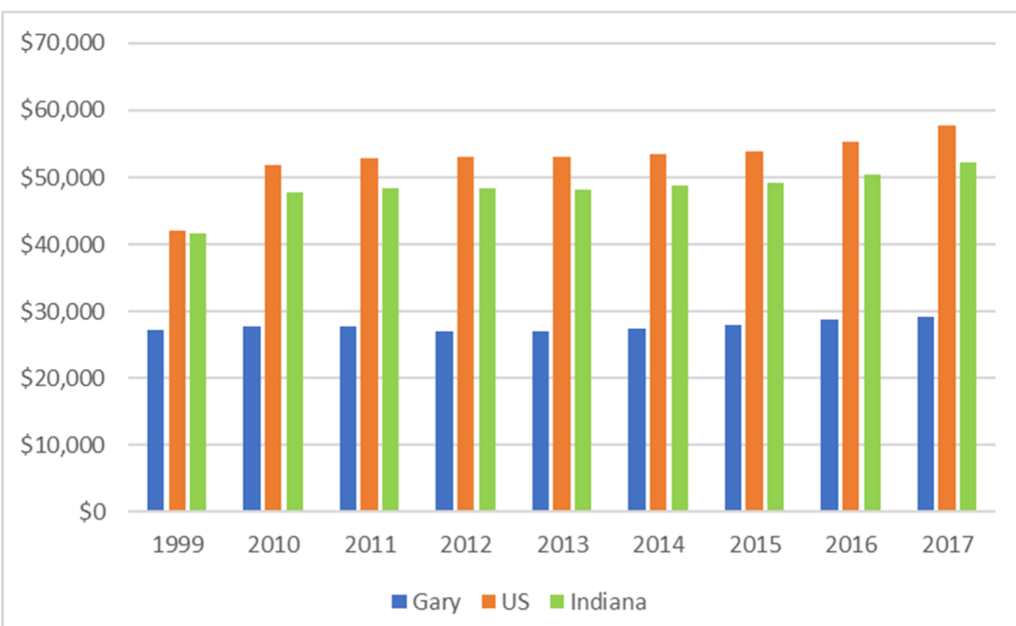
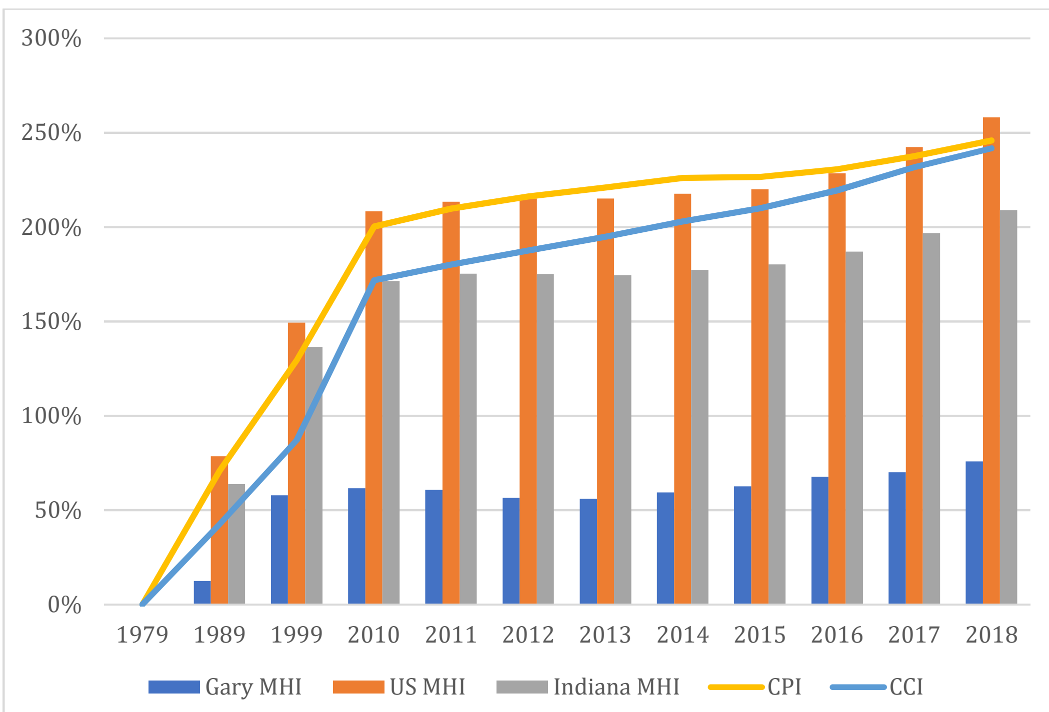



**Figure 1. Median Household Income**

CDM Smith

Since 1999, historical median household income annual growth in Gary has been 0.6%. Over the same period, area CPI has increased at an annual rate of 1.8%, and ENR Construction Cost Index (CCI) has increased at 4.1% per year. Given historical MHI growth trends, it is likely that this disparity will continue to grow in the future. As is clear from the historical data, income growth in the City has lagged significantly behind the CPI and CCI, a trend that will certainly continue for the foreseeable future. The historical and ongoing decline in real incomes that is a major contributor to the very real affordability challenge GSD faces in undertaking any CSO long-term control plan. GSD strongly believes that the EPA static approach initially developed by EPA in 1997 presents a very unrealistic view of the challenges faced by the city of Gary and GSD.

The following figure illustrates the cumulative impact of the differential increases in Gary MHI compared to the primary cost indices. The GSD does not believe that it is reasonable to expect a major reversal of this 40-plus year trend. And, this is the fundamental reason that GSD believes that the household burden calculated through the static method is misleading and why the GSD has concluded that it has limited capacity to move forward with a LTCP implementation.




The dire income picture in Figure 7-4 is further reinforced by the incidence of poverty in Gary summarized in Figure 7-5. The poverty rate has increased from approximately 25 percent of the population in 1999 to approximately 32 percent in 2017. Given the recent disruptions caused by COVID, we believe that the poverty rate is likely to have shot up even further in the last year.

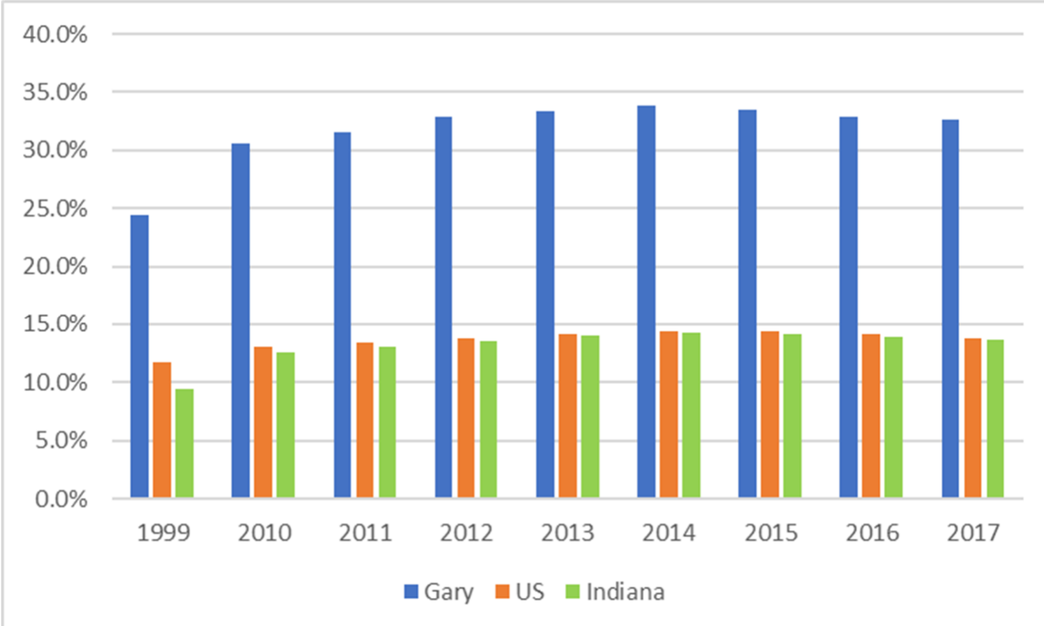



**Figure 2. Poverty Level – Households**

The demographic trends in part reflect the significant loss in employment within the City of Gary. In addition to the direct impact on the income of the City's residents, it also has significantly reduced the billable flow to the GSD treatment plant and resulted in residential customers bearing an even larger share. Earlier this year, US Steel temporarily closed one of the last remaining major industrial facilities in the City. The risk is that such facilities will be permanently shuttered over time and compounds the burden on residential customers.

The City's residents face a high sewer cost burden with the household burden index currently near 2 percent. The historical and ongoing decline in real incomes is a major contributor to the very real affordability challenge GSD faces in undertaking any CSO long-term control plan. GSD strongly believes that the EPA static approach initially developed by EPA in 1997 presents a very unrealistic view of the challenges faced by the city of Gary and GSD. EPA has recognized the significant limitations of the approach and endorsed in its 2014 FCA modification the use of the dynamic modeling approach that GSD used in its formal submittal to the Agencies.

The City has experienced years of population decline, which reduces the customer base to pay for infrastructure improvements. Given the combination of slow income growth, high levels of poverty and a declining population, it is unlikely that the City will experience income or population growth in line with regional and national trends—continued declines are possible.

The initial submittal to the Agencies based on the dynamic approach estimated the future household burden to exceed 5.4 percent for a median income household. For a household in the lowest quintile, the burden will exceed **15 percent**. The GSD evaluated the burden under the static approach but seeking to incorporate the impact of differential inflation. It is estimated that under this approach the burden will be approximately 2.4 percent. And for a household that is at or the poverty level (which accounts for over 30 percent of Gary's households), the burden is at least 3.2 percent. For the households at the lowest quintile income level, the burden is at least 7.3 percent.

GSD also wants to clarify that both the static and dynamic evaluations it has prepared reflect the contribution of the outside wholesale customers consistent with the intermunicipal agreements that govern the relationship.

This litany of factors is the reason that the City has concluded that the GSD has limited capacity to proceed with capital investments. And, the GSD strongly believes that the static approach requested by EPA does not reflect the City's real situation.

2) *Table 8-4 in the addendum provided by GSD shows overflows from CSO 015 being reduced from 13/year (currently) to 12/year (after Phase 1). However, in the initially submitted plan (August 8, 2019), Table ES-1 shows CSO 015 as having 7 OF/year after implementation of control measures in Phase 1. Please explain this discrepancy.*

Response: Table 8-4 contains some typographical errors. Some data for CSO 013 and CSO 015 were mixed. The corrected table is below. Changes are highlighted in the table.

| NPDES Outfall # | Outfall Location | Current | Selected Alternative | | |
|---|---|---|---|---|---|
| | | | Phase 1 | Phase 2 | Phase 3 |
| **West Branch Little Calumet River** | | | | | |
| 004 | 15th Avenue and Elkhart Street | 16 | 7 | 7 | 4 |
| 005 | 32nd Avenue and Broadway West | 13 | 7 | 3 | 3 |
| 013 | 25th Avenue and Louisiana Street | 26 | 12 | 4 | 4 |
| 015 | 32nd Broadway and Alley 1 East | 13 | 7 | 3 | 3 |
| | TOTAL | 26 | 12 | 7 | 4 |
| **East Branch Grand Calumet River** | | | | | |
| 006 | Rhode Island Street at East Interceptor | 10 | 9 | 7 | 3 |
| 007 | Alley 9 at East Interceptor | 4 | 8 | 7 | 3 |
| 008 | Polk Street at East Interceptor | 9 | 7 | 5 | 2 |
| 009 | Pierce Street at East Interceptor | 14 | 7 | 5 | 4 |
| 010 | Bridge Street at East Interceptor | 3 | 3 | 2 | 2 |
| 011 | Chase Street at East Interceptor | 3 | 3 | 3 | 2 |
| 012 | Colfax Street at West Interceptor | 5 | 4 | 4 | 4 |
| | TOTAL | 14 | 9 | 7 | 4 |
| | **SYSTEMWIDE TOTAL** | **26** | **12** | **7** | **4** |

3) *GSD may include collection system expenditures in their estimate of LTCP costs. Please identify if such costs have been included.*

Both the evaluations prepared by the GSD (static and dynamic) include the collection system expenditures. The GSD has included an estimate of approximately $1 million per year in 2019 dollars. This is on top of the currently budgeted and expended costs in the GSD's annual budget. Those are estimated to be $2.1 million. Attached electronically in the email with this document for EPA's use are the GSD budgets used in developing the financial model and analysis.

4) *GSD notes that its contingencies total 60%. This percentage seems high. Please further break out these costs.*

Response: At this stage of a project, Planning, many items are unknown, and it is normal to add factors to a cost estimate. For instance, very limited information is available for each site or about specific of the design. It is not feasible or economical to pursue all the site and design details for the approximately 50 different projects evaluated. For Planning level costs include contingency factors that increase the costs because of the many unknowns at this stage of a project. Factors include Undeveloped Design Details (UDD), Site Adjustment Factor (SAF) and Engineering and Administration (E&A). UDD is the preliminary nature of the design and adds 25%. SAF recognize the limited knowledge of the site and is 20%, E&A is the cost to manage and design the facilities and is 15%. As the project goes forward, into preliminary and final design stages, and more information becomes know, the contingency is reduced.

5) *GSD's use of outfall weirs creates unnecessary work for GSD. Wouldn't raising the primary weirs and eliminating the outfall weirs accomplish the same objective, while eliminating the need to pump out the outfalls?*

Response: GSD's combined sewer system must convey stormwater from large storms as well as sanitary sewer flows. Yes, raising the primary weir could negate the need for the downstream weir. However, the ceiling (top) of the regulator chamber limits the raising of the primary weir. The opening between the primary weir and the top of the chamber must be large enough to pass flows from large storms. Just raising the primary weir to be above a high river level would throttle the discharge at the CSO and contribute to upstream flooding.

6) *For GSD and the retail service area:*

a) *Provide the calculation and sources relied upon for GSD's Annual Operations and Maintenance Expenses value ($21.3 million) used in its 2020 Financial Capability Analysis.*

In the tables included in the Addenda submitted to EPA using the static approach we carried the O&M amount from the 2019 budget of approximately $27 million. This was then reduced by approximately $5.5 million reflecting the amount received from the outside communities, since the EPA static method does not provide a place to account for this kind of outside revenues.

As noted, attached electronically in the email with this document are the GSD budgets used in developing the financial analysis and model.

b) *Confirm and provide the basis for GSD's $0 estimated operations and maintenance costs resulting from the implementation of the long-term capital plan in its 2020 Financial Capability Analysis.*

The CSO abatement projects that the GSD has focused into its FCA are largely rehabilitation of existing assets and structures. No new assets are proposed to be constructed or mechanical facilities built or expanded. Therefore, the GSD does not anticipate any additional O&M costs beyond the ongoing increase due to cost increases and increased maintenance as the system ages. Those factors are built into the projected O&M costs used as part of the original FCA submittal.

c) *Specify whether GSD has engaged in discussions with the Indiana State Revolving Fund Loan Program regarding the availability of funds to finance the GSD's capital costs.*

The GSD has not undertaken in any such discussions since it is premature until the GSD has finalized what it will need to finance.

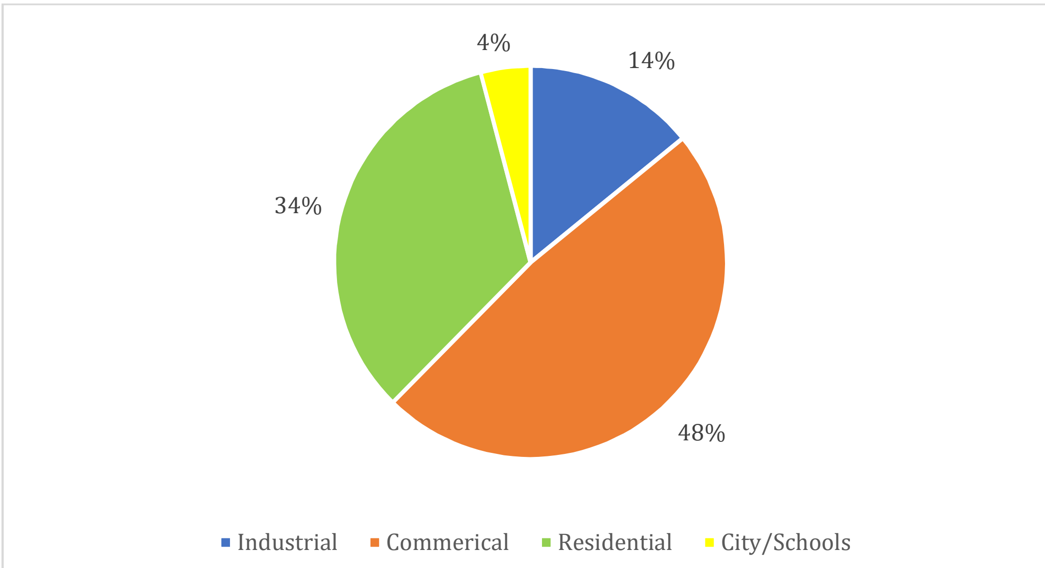
d) *For the retail service area, provide annual information on wastewater flows billed by customer category (residential, multi-family, industrial, and commercial). The value can include an allocation of infiltration/inflow if that allocation is used in the existing rate. Advise if residential households are likely provided service via commercial customer accounts (i.e., those in multi-family buildings).*

The costs to customers are based on the District's billing system which generally bill customers based on metered water consumption. Thus, I/I is not allocated to customers directly or by customer class but becomes a systemwide cost borne by all customers. Wholesale customers are allocated their share of costs based on wastewater receiving at metering stations and then billed in accordance with the respective intermunicipal agreement.

Many of the city's dwelling units are in multi-family structures some of which are treated as commercial accounts within the City's billing system. The GSD does not use strict business rules for which structures are counted as residential and which are commercial (and since the GSD uses a uniform rate structure it does not really impact revenues or provide the GSD relevant information to manage its customer base).

GSD believes that calculating typical residential consumption using the Residential billing category alone understates the actual consumption by residential type customers, as any multi-family structures categorized within the Commercial billing category would not be included in the calculation. Using City billing data for the Residential and Gary Housing Authority customer classes, the average annual dwelling unit consumption is calculated to be approximately 33,000 gallons. (Totaling that consumption and dividing by the number of occupied dwelling units from Census data.) Including the Commercial billing category (in which some amount of residential multi-family structures is included), the typical annual dwelling unit consumption would be approximately 80,000 gallons. There is no simple way to separate out the multi-family dwelling units that are in the Commercial customer class. Therefore, purposes of the FCA, a figure of 50,000 gallons per year has been used that implicitly assumes that approximately one-half of the Commercial customer class consumption is by multi-family dwelling units. This is likely high relative to the actual; but GSD believes a reasonable estimate for purposes of the FCA.

For FY 2018, the GSD billed retail customers for 3.036 billion gallons. The following chart allocates the consumption across the major customer categories.




e) *Identify the asset management costs that Gary has included, if any in its FCA calculations for either current or projected activity.*

As noted in the assumptions to the LTCP FCA section, the projections include an allowance of $1.0 million per year (phased up for the collection system) and $7 million a year when fully phased in for the WWTP. These are inflated from 2019 to reflect capital cost increases over time in the dynamic approach.

| | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
|---|---|---|---|---|---|---|
| Collection System | $1,380,000 | $1,680,000 | $1,980,000 | $2,280,000 | $2,580,000 | $2,100,000 |
| WWTP | $920,000 | $1,920,000 | $2,920,000 | $3,920,000 | $4,920,000 | $7,000,000 |

The amount of collection system allowance remains at $2.1 million per year and the WWTP allowance remains at $7 million per year after FY 2025.

7) *For the satellite communities/wholesale service area:*

a) *Identify if Hobart, IN may be disconnecting from GSD in near future.*

GSD is aware that Hobart is evaluating potentially developing its own treatment facility. GSD does not know whether Hobart will ultimately move forward with that project.

b) *Estimate annual operations and maintenance (O&M) and annual debt service costs borne by the satellite communities with respect to the portion of the system served by GSD, excluding the payments the communities make to GSD. Provide backup documentation (e.g., the most recent Comprehensive Annual Report, current year budget, an or internal financial statements). If the backup documentation combines O&M and debt service for all areas within the wholesale/satellite community receiving wastewater service from GSD, provide basis for allocation of costs to the portion of service area GSD serves.*

Based on the conference call conducted July 28, 2020, our understanding is that the first part of that question is actually requesting information regarding the costs of the local retail systems for each of the communities. GSD has never received this information so based the dynamic FCA on the wholesale customers' responses to the 308a data request made by EPA.

As requested, attached to this document are the financial reports each entity is required to submit to the State of Indiana each year.

As noted, several times, the GSD allocates costs to the wholesale customers based on the intermunicipal agreement with each of the parties. Generally, those agreements allocate O&M costs to the customers based on their proportionate share of flow at the plant for the respective billing period. Debt service and capital costs are based on capacity calculations for each member community. The Agreements do not provide for the allocation of GSD's collection system costs to the wholesale customers.

As requested on the conference call, but not included in the written questions, the Agreements with the wholesale customers are attached to this document.

c) *For each satellite community, provide annual wastewater flows billed by customer category (residential, multi-family residential, industrial, and commercial) and the residential factor (percent of flow billed to residential users) for the portion of the system served by GSD. This value can include an allocation of infiltration/inflow if that allocation is used in the existing rates. Also advise if residential households are likely to receive service via commercial customer accounts (i.e., those in multi-family apartment buildings). If data with respect to GSD's portion of the service area are not available, provide flow data for the entire wholesale/satellite community and identify the approximate share of flow that is sent to GSD for treatment.*

GSD bills each member community based on the wastewater flow measured at a defined point of demarcation, generally a pumping station. GSD does not have any information on the flow composition within each of the member communities. The flow data for each community is summarized in the table below.

**Outside Community Flow, MG**

| | 2016 | 2017 | 2018 |
|---|---|---|---|
| Hobart | 1,430 | 1,331 | 1,260 |
| Lake Station | 650 | 626 | 561 |
| Merrillville | 2,065 | 1,899 | 1,923 |

8) *Provide a fully functional, "live" version of the financial model GSD used to project the impact of the proposed capital program on the future revenue requirements and rates for GSD and its residents (i.e., the rate model).*

The model as requested is included in the email submittal with this document.

As discussed on the call, EPA and Industrial Economics will restrict their use of the model to an evaluation of the Gary FCA submission and no other purpose.

Furthermore, the EPA and Industrial Economics will log and track any changes/adjustments to the model on the notation sheet (the first tab in the model).

At the parties' convenience, CDM Smith will provide an overview of the model to assist the parties review the model and understand its construction.

9) *If available, provide the following financial information for Gary, IN not included the city's 2018 CAFR or otherwise publicly available. If this information is not available, explain why.*

a) *Direct net debt;*

b) *Debt of overlapping entities;*

c) *Full market value of real property;*

d) *Property tax revenues collected; and*

e) *Property taxes levied.*

The available information is provided. As discussed, these metrics are for the City of Gary and the Gary Sanitary District is a separate legal entity and does not have access to the City's general fund and tax base. Therefore, these metrics are irrelevant to the GSD's financial capability.

# Appendix 1

# U.S. Environmental Protection Agency's Letter

## Wagle, Mandeera

**From:** Daniel Vicari <dan@garysan.com>
**Sent:** Friday, July 31, 2020 10:03 AM
**To:** Wagle, Mandeera; Mercer, Gary; Ridge, Joseph; Karl Cender; jmeyer@jimmeyerlaw.com
**Cc:** Attorney Tony Walker
**Subject:** Fwd: EPA and IDEM comments on the Alternatives Analysis and Financial Cost Assessment
**Attachments:** Comments on GSD Alternatives Analysis mjk 20200715.pdf; ATT00001.htm

FYI.

Begin forwarded message:

> **From:** "Koller, Mark" <koller.mark@epa.gov>
> **Date:** July 31, 2020 at 9:58:35 AM CDT
> **To:** Daniel Vicari <dan@garysan.com>
> **Cc:** "Hodaj, Andi" <hodaj.andi@epa.gov>, Beth Admire <badmire@idem.IN.gov>, "Wendholt, Kara" <KWendhol@idem.IN.gov>, "TENNIS, DAVE" <DTENNIS@idem.IN.gov>
> **Subject: EPA and IDEM comments on the Alternatives Analysis and Financial Cost Assessment**
>
> Dan,
>
> I'm pleased we could all get on the phone earlier this week to talk about the comments/questions that EPA and IDEM have about the addendum to the AA and the FCA. EPA and IDEM are considering the comments provided final and ask that a response be provided within 30 days.
>
> Mark J. Koller
> Associate Regional Counsel
> Office of Regional Counsel (C-14J)
> U.S. EPA, Region 5
> 77 West Jackson Boulevard
> Chicago, Illinois 60604
> (312) 353-2591 (phone)
> (312) 385-5414 (fax)

1) GSD concludes that Gary falls in the mid-range for Residential Indicator (1.8% of MHI). EPA's contractor also concludes that Gary falls in the mid-range for Residential Indicator, but arrives at 1.5% MHI after considering data for GSD's entire service area population. Provide the basis and supporting documentation for the statement on page 7-17 of the Combined Sewer Overflow Long Term Control Plan Alternative Analysis and Recommended Plan Evaluation (August 2019): "The city of Gary has limited capacity to undertake any level of capital investment." Specifically, identify how the City arrived at this conclusion.

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a) Provide the calculation and sources relied upon for GSD's Annual Operations and Maintenance Expenses value ($21.3 million) used in its 2020 Financial Capability Analysis.

b) Confirm and provide the basis for GSD's $0 estimated annual operation and maintenance costs resulting from implementation of the long-term capital plan in its 2020 Financial Capability Analysis.

c) Specify whether GSD has engaged in discussions with Indiana State Revolving Fund Loan Program regarding the availability of funds to finance GSD's capital costs.

d) For the retail service area, provide available annual information on wastewater flows billed by customer category (residential, multi-family, industrial, and commercial). This value can include an allocation of infiltration/inflow if that allocation is used in the existing rates. Advise if residential households are likely provided service via commercial customer accounts (i.e., those in multi-family apartment buildings).

e) Identify the asset management costs that Gary has included, if any, in its FCA calculations for either current or projected activity.

7) For the satellite communities/wholesale service area:

a) Identify if Hobart, IN may be disconnecting from GSD in near future.

b) Estimate annual operations and maintenance (O&M) and annual debt service costs borne by the satellite communities with respect to the portion of the system served by GSD, excluding payments the communities make to GSD. Provide backup documentation (e.g., the most recent Comprehensive

Annual Financial Report, current year budget, and/or internal financial statements). If the backup documentation combines O&M and debt service for all areas within the wholesale/satellite community receiving wastewater service from GSD, provide basis for allocation of costs to the portion of the service area GSD serves.

c) For each satellite community, provide annual wastewater flows billed by customer category (residential, multi-family residential, industrial, and commercial) and the residential factor (percent of flow billed to residential users) for the portion of the system served by GSD. This value can include an allocation of infiltration/inflow if that allocation is used in the existing rates. Also advise if residential households are likely to receive service via commercial customer accounts (i.e., those in multi-family apartment buildings). If data with respect to GSD's portion of the service area are not available, provide flow data for the entire wholesale/satellite community and identify the approximate share of flow that is sent to GSD for treatment.

8) Provide a fully functional, "live" version of the financial model GSD used to project the impact of the proposed capital program on the future revenue requirements and rates for GSD and its residents (i.e., the rate model).

9) If available, provide the following financial information for Gary, IN not included the city's 2018 CAFR or otherwise publicly available. If this information is not available, explain why.

a) Direct net debt;

b) Debt of overlapping entities;

c) Full market value of real property;

d) Property tax revenues collected; and

e) Property taxes levied.

# Appendix 2

# Financial Capability Support Materials

# Appendix 2-1

# GSD Budgets Used to Develop the Financial Model and Analysis

**Note: The electronic files of these budgets has been delivered electronically with this document.**

**Filenames:**

1. **2019 GSD Proposed Budget Fund (670) (Staff Accountant's Copy) FINAL 12_27 CW - 12-27-18.xlsx**
2. **2019 GSWMD Proposed Budget (Fund 677) (Staff Accountant 's Copy) - FINAL - 12-27-18.xlsx**

# Appendix 2-2

## City of Gary 2019 Financial Information

Series 2019
**Higher Education**

| College or University | Location | App. Miles from City by Car |
|---|---|---|
| Trinity Faith Based University | Gary, Indiana | 0 |
| Gary Middle College | Gary, Indiana | 0 |
| Indiana University Northwest | Gary, Indiana | 0 |
| Purdue University Northwest | Hammond, Indiana | 9.5 |
| Brightwood College | Hammond, Indiana | 10.5 |
| Everest College | Merrillville, Indiana | 12 |
| Indiana Wesleyan University | Merrillville, Indiana | 12 |
| Calumet College of St. Joseph | Whiting, Indiana | 12 |
| South Suburban College | South Holland, Illinois | 19 |
| Prairie State College | Chicago Heights, Illinois | 21 |
| Chicago State University | Chicago, Illinois | 22 |
| Olive-Harvey College | Chicago, Illinois | 22 |
| University of Chicago | Chicago, Illinois | 23 |
| Richard J. Dailey College | Chicago, Illinois | 28 |
| Governors State University | University Park, Illinois | 30 |
| Columbia College Chicago | Chicago, Illinois | 30 |
| Saint Xavier University | Chicago, Illinois | 31 |
| Roosevelt University | Chicago, Illinois | 31 |
| Harold Washington College | Chicago, Illinois | 31 |
| University of Illinois at Chicago | Chicago, Illinois | 39 |
| Loyola University Chicago | Chicago, Illinois | 39 |

Series 2019
**Educational background of City area residents, age 25 and over**

| | The City | Lake County | State of Indiana |
|---|---|---|---|
| Less than 9th grade | 4.4% | 4.3% | 3.7% |
| 9th to 12th grade, no diploma | 10.6% | 7.6% | 7.7% |
| High school graduate (includes equivalency) | 38.5% | 35.0% | 33.5% |
| Some college, no degree | 25.0% | 22.5% | 20.4% |
| Associate's degree | 8.4% | 8.5% | 8.7% |
| Bachelor's degree | 8.0% | 14.8% | 16.5% |
| Graduate or professional degree | 5.2% | 1.9% | 9.4% |
| Percent high school graduate or higher | 85.1% | 82.7% | 88.5% |
| Percent bachelor's degree or higher | 13.2% | 16.7% | 25.9% |

Series 2019
**Distribution of home values for owner-occupied units**

| Value of Specified Owner-Occupied Units | The City | Lake County | State of Indiana |
|---|---|---|---|
| Total | 14,115 | 130,957 | 1,791,749 |
| Under $50,000 | 4,537 | 9,338 | 146,135 |
| $50,000 to $99,999 | 6,671 | 26,901 | 376,441 |
| $100,000 to $149,999 | 1,433 | 26,950 | 394,172 |
| $150,000 to $199,999 | 701 | 23,459 | 329,256 |
| $200,000 to $299,999 | 446 | 26,663 | 299,262 |
| $300,000 to $499,999 | 40 | 12,545 | 178,298 |
| $500,000 to $999,999 | 241 | 4,081 | 56,876 |
| $1,000,000 or more | 46 | 1,020 | 11,309 |

Series 2019
**Per Capita Income** (in 2016 inflation-adjusted dollars)

| | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|
| City | $ 16,305 | $ 16,907 | $ 17,392 | $ 19,207 | n/a |
| Lake County | $ 24,756 | $ 25,483 | $ 26,590 | $ 27,259 | n/a |
| Indiana | $ 25,346 | $ 26,117 | $ 27,305 | $ 27,464 | n/a |

## Appendix C - DEBT AND TAXATION

### TAX BASE

Series 2019
**Historical Net Assessed Valuation**

| Pay Year | Net Assessed Value | % Change |
|---|---|---|
| 2020 | $ 1,882,359,040.00 | 0.1% |
| 2019 | $ 1,880,421,698.00 | 3.2% |
| 2018 | $ 1,821,806,980.00 | -3.7% |
| 2017 | $ 1,891,453,122.00 | -4.3% |
| 2016 | $ 1,975,894,664.00 | |

Series 2019
## Detail of Net Assessed Valuation (Pay 2019) (pay 2020 is not yet available)

| | | |
|---|---|---|
| Gross Value of Land | $507,334,200 | |
| Gross Value of Improvements | $1,782,156,798 | |
| Total Gross Value of Real Estate | $2,289,490,998 | |
| Less: Exemptions | $678,242,619 | |
| Less: TIF | $202,015,023 | |
| **Net Assessed Value of Real Estate** | **$1,409,233,356** | 67.5% |
| | | |
| Business Personal Property | $530,940,888 | |
| Less: Deductions | $4,907,660 | |
| Tax Exempt Property | $25,244,600 | |
| Less: TIF | $25,735,588 | |
| **Net Assessed Value of Personal Property** | **$475,053,040** | 22.8% |
| **Net Assessed Value of Rail Roads** | **$202,205,250** | 9.7% |
| | | |
| **Total Taxable Assessed Value** | **$2,086,491,646** | 100.0% |

Series 2019
## Larger Taxpayers (Pay 2019)

| Property Owner | Net Assessed Value | % of Total |
|---|---|---|
| United States Steel Corp. | $ 399,830,440 | 19.16% |
| NIPSCO | $ 79,462,510 | 3.81% |
| Indiana American Water Co. | $ 61,940,630 | 2.97% |
| Wisconsin Central Ltd. | $ 41,092,260 | 1.97% |
| Buffington Harbor Riverboats LLC | $ 36,862,300 | 1.77% |
| Majestic Star Casinos | $ 20,986,150 | 1.01% |
| PRAXAIR, INC | $ 20,525,950 | 0.98% |
| Carmeuse Lime Inc. | $ 14,650,420 | 0.70% |
| Lakeshore Dunes LP | $ 13,308,770 | 0.64% |
| Gary Industrial Holdings | $ 11,153,400 | 0.53% |
| Total | $ 699,812,830 | 33.54% |

Series 2019
## Record of Taxes Levied & Collected

| | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|
| Taxes Levied | $ 67,169,591.00 | $ 68,737,423.00 | $ 71,341,829.00 | $ 74,473,648.00 | $ 77,114,213.00 |
| Less: Circuit Breaker Tax Credits | $ 26,398,072.00 | $ 31,073,139.00 | $ 36,032,601.00 | $ 40,609,650.00 | $ 41,491,169.00 |
| Net Taxes Levied | $ 40,771,519.00 | $ 37,664,284.00 | $ 35,309,228.00 | $ 33,863,998.00 | $ 35,623,044.00 |
| | | | | | |
| Total Property Taxes Collected | $ 30,108,936.00 | $ 28,269,552.00 | $ 26,143,513.00 | $ 28,883,780.00 | $ 28,604,912.00 |
| (Includes Current & Delinquent) | | | | | |
| Collection as % of Net Taxes Levied | 73.85% | 75.06% | 74.04% | 85.29% | 80.30% |

Series 2019
## Historical Tax Rates (City Only)

| | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|
| Fund Name | | | | | |
| General | 2.9484 | 3.3257 | 3.669 | 3.9161 | 3.9317 |
| Cum Cap Development | 0.0063 | 0.0063 | 0.0063 | 0.0287 | 0.0278 |
| Parks & Recreation | 0.1321 | 0.0759 | 0.0965 | 0.1152 | 0.1414 |
| Police Pension | 0 | 0.0709 | 0 | 0.0279 | 0 |
| Exempt Debt | 0.0057 | 0 | 0 | - | - |
| Total Rate | 3.0925 | 3.4788 | 3.7718 | 4.0879 | 4.1009 |

Series 2019
## Direct & Indirect Debt

| City of Gary Direct Debt | Amount |
|---|---|
| Property Tax Supported Debt | |
| n/a | - |
| Total Property Tax Supported Debt | $ - |
| | |
| Revenue Obligations | |
| Special Revenue Bonds, Series 2016 | $ 8,855,000.00 |
| Wheel Tax Revenue Bonds, Series 2017 | $ 2,560,000.00 |
| Total Property Tax Supported Debt | $ 11,415,000.00 |
| | |
| **Total Direct Debt of the City** | **$ 11,415,000.00** |

| City of Gary Indirect Debt | Amount |
|---|---|
| Lease Rental Obligations | |
| Gary Building Corporation, Series 2019 | $ 40,000,000.00 |
| **Total Indirect Obligations of the City** | **$ 40,000,000.00** |

| Gary Sanitary District Debt | Amount |
|---|---|
| Revenue Obligations | |
| Sewage Works Revenue Bonds, Series 2011 | $ - |
| * refinanced by 2020 privately placed | |
| Sewage Works Refunding Revenue Bonds, Series 2013 - paid off 1/30/20 | $ - |
| Gary Sanitary District, Series 2020A | $ 22,120,000.00 |
| Total Indirect Obligations | $ 22,120,000.00 |

Series 2019
**Debt Issuance Limitation**

| | | |
|---|---|---|
| New Assessed Valuation (Pay 2019) | $ | 1,880,421,698.00 |
| NAV Divided by 3 | $ | 626,807,232.67 |
| Multiplied by 2% | $ | 12,536,144.65 |
| | | |
| Debt Limit | $ | 12,536,144.65 |
| Debt Subject to Limitation | $ | 8,855,000.00 |
| Issuance Margin | $ | 3,681,144.65 |

Series 2019
**Direct and Indirect Debt Per Capita**

| | | |
|---|---|---|
| Population (2018 - most recent available) | | 75,282 |
| Direct Debt of the City | $ | 11,415,000.00 |
| Direct & Indirect Debt of the City | $ | 51,415,000.00 |
| | | |
| Direct Debt per Capita * | $ | 151.63 |
| Direct & Indirect Debt per Capita * | $ | 682.97 |

* Does not include overlapping debt

Series 2019
**Gary Sanitary District (Gary, Indiana), Series 2020A** (privately placed)

| Maturity Date | Maturity | Interest | Debt Service | Balance |
|---|---|---|---|---|
| 07/15/20 | | $ 318,344 | $ 318,344 | $ 22,120,000 |
| 01/15/21 | $ 425,000 | $ 347,284 | $ 772,284 | $ 21,695,000 |
| 07/15/21 | | $ 340,612 | $ 340,612 | $ 21,695,000 |
| 01/15/22 | $ 400,000 | $ 340,612 | $ 740,612 | $ 21,295,000 |
| 07/15/22 | | $ 272,576 | $ 272,576 | $ 21,295,000 |
| 01/15/23 | $ 1,910,000 | $ 272,576 | $ 2,182,576 | $ 19,385,000 |
| 07/15/23 | | $ 248,128 | $ 248,128 | $ 19,385,000 |
| 01/15/24 | $ 1,950,000 | $ 248,128 | $ 2,198,128 | $ 17,435,000 |
| 07/15/24 | | $ 223,168 | $ 223,168 | $ 17,435,000 |
| 01/15/25 | $ 1,990,000 | $ 223,168 | $ 2,213,168 | $ 15,445,000 |
| 07/15/25 | | $ 197,696 | $ 197,696 | $ 15,445,000 |
| 01/15/26 | $ 2,035,000 | $ 197,696 | $ 2,232,696 | $ 13,410,000 |
| 07/15/26 | | $ 171,648 | $ 171,648 | $ 13,410,000 |
| 01/15/27 | $ 2,085,000 | $ 171,648 | $ 2,256,648 | $ 11,325,000 |
| 07/15/27 | | $ 144,960 | $ 144,960 | $ 11,325,000 |
| 01/15/28 | $ 2,145,000 | $ 144,960 | $ 2,289,960 | $ 9,180,000 |
| 07/15/28 | | $ 117,504 | $ 117,504 | $ 9,180,000 |
| 01/15/29 | $ 2,205,000 | $ 117,504 | $ 2,322,504 | $ 6,975,000 |
| 07/15/29 | | $ 89,280 | $ 89,280 | $ 6,975,000 |
| 01/15/30 | $ 2,265,000 | $ 89,280 | $ 2,354,280 | $ 4,710,000 |
| 07/15/30 | | $ 60,288 | $ 60,288 | $ 4,710,000 |
| 01/15/31 | $ 2,325,000 | $ 60,288 | $ 2,385,288 | $ 2,385,000 |
| 07/15/31 | | $ 30,528 | $ 30,528 | $ 2,385,000 |
| 01/15/32 | $ 2,385,000 | $ 30,528 | $ 2,415,528 | $ - |
| **Total** | **$ 22,120,000** | **$ 4,458,403** | **$ 26,578,403** | |

Series 2019
**Gary Sanitary District Sewage Works Revenue Bonds of 2011, Series A* (Payable from Net Revenues of Sewage Works)**

| Maturity Date | Maturity | Interest | Debt Service | Balance |
|---|---|---|---|---|
| **Total** | | | | |

*** THIS SECTION INTENTIONALLY LEFT BLANK - THE SANITARY DISTRICT OF GARY INDIANA SANITARY DISTRICT REVENUE BONDS OF 2011, SERIES A, WAS DEFEASED ON JANUARY 30, 2020, BY A PRIVATELY PLACED BOND.*

Series 2019
**Gary Sanitary District Sewage Works Refunding Revenue Bonds, Series 2013** (Payable from Net Revenues of Sewage Works)**

**Debt Service Schedule**

| Maturity Date | Maturity | Coupon | Interest | Debt Service | Annual D/S | Balance |
|---|---|---|---|---|---|---|
| Total | | | | | | |

*** THIS SECTION INTENTIONALLY LEFT BLANK - THE SANITARY DISTRICT OF GARY, INDIANA SANITARY DISTRICT REFUNDING REVENUE BONDS, SERIES 2013 WAS PAID OFF AND DEFEASED ON JANUARY 30, 2020.*

# Appendix 2-3

# Gary School Corporation 2019 Debt

# GARY COMMUNITY SCHOOL CORPORATION

**LAKE COUNTY, INDIANA**

**DEBT AND TAXATION**

**(as of March 30, 2020)**

**Direct and Overlapping Debt**

| Direct Debt | Total Debt | Percentage Applicable | Amount Applicable |
|---|---|---|---|
| General Obligation Refunding Bonds, Series 2019 *(refunded 2009s June 2019)* | $ 4,435,000.00 | 100.00% | $ 4,435,000 |
| General Obligation Judgment Bonds, Series 2015 | 1,060,000 | 100.00% | 1,060,000 |
| General Obligation Judgment Funding, Series 2012 | 2,515,000 | 100.00% | 2,515,000 |
| Common School Loans | 37,057,887 | 100.00% | 37,057,887 |
| | | | $ 45,067,887.00 |
| Underlying Debt | | | |
| Tax. Ad Valorem Prop. Tax 1st Mortgage Refunding Bonds, Series 2020 *(refunded 2013)* | $ 16,015,000.00 | 100.00% | $ 16,015,000.00 |
| Ad Valorem Property Tax First Mortgage Refunding Bonds, Series 2012 | 10,300,000 | 100.00% | 10,300,000 |
| Taxable Ad Valorem Property Tax First Mortgage Bonds, Series 2010 | 8,000,000 | 100.00% | 8,000,000 |
| | | | $ 34,315,000.00 |
| **Total Direct Debt** | | | **$ 79,382,887.00** |
| | | | |
| Overlapping Debt | | | |
| City of Gary | - | 95.73% | - |
| Gary Library | - | 100.00% | - |
| Lake County | $ 67,725,000.00 | 7.46% | $ 5,048,965.00 |
| Lake County Parks | 29,350,000 | 7.46% | 2,188,071 |
| Lake County Solid Waste Management District | 3,585,000 | 7.46% | 267,265 |
| **Total Overlapping Debt** | | | **$ 7,504,301.00** |
| **TOTAL DEBT** | | | **$ 86,887,188.00** |

**Per Capita and Debt Ratio Analysis**

| | Amount | Debt Per Capita | Percentage of Debt/Assessed Valuation |
|---|---|---|---|
| Population - July 1, 2019 Estimate | 74,879 | | |
| Assessed Valuation - 2019 Payable 2020 | $ 1,801,916,021.00 | | |
| Total Direct Debt | $ 34,315,000 | $ 458.27 | 1.90% |
| Total Underlying Debt | 45,067,887 | 601.88 | 2.50% |
| Total Overlapping Direct Debt and Lease Obligations | 7,504,301 | 100.22 | 0.42% |
| Total | $ 86,887,188 | $ 1,160.37 | 4.82% |

**Direct Debt Issuance Limitation**

| | |
|---|---|
| Assessed Valuation - 2019 Payable 2020 | 1,801,916,021 |
| One-Third of Assessed Valuation – 2019 Payable 2020 | 600,638,674 |
| Statutory Limitation of 2%[1] | 12,012,773 |
| Debt Subject to Limitation (Excludes Common School Loans) | 8,010,000 |
| Issuance Margin | 4,002,773 |

# Appendix 2-4

# Municipal Agreements

- Hobart
- Lake Station
- Merrillville Conservancy District

**Note: Please refer to Appendix 2-1 of the Revised CSO Characterization Report, dated 1/31/2019, for these agreements.**

# Appendix 2-5

# Financial Model

**Note: A live version of the financial model has been delivered electronically with this document.**

**Filename: GSD Affordability Model_For EPA_20200821.xlsx**